P/ NT COOPERATION TREAT

	From the INTERNATIONAL BUREAU
PCT	То:
NOTIFICATION OF ELECTION (PCT Rule 61.2) Date of mailing (day/month/year) 08 June 2000 (08.06.00) International application No.	Assistant Commissioner for Patents United States Patent and Trademark Office Box PCT Washington, D.C.20231 ETATS-UNIS D'AMERIQUE in its capacity as elected Office Applicant's or agent's file reference
PCT/AU99/00909	Priority date (day/month/year)
International filing date (day/month/year) 19 October 1999 (19.10.99)	19 October 1998 (19.10.98)
Applicant	
SAVUR, Sanjay et al	
1. The designated Office is hereby notified of its election made. X	y Examining Authority on: 18.05.00) national Bureau on:
	Authorized officer
The International Bureau of WIPO 34, chemin des Colombettes	Nestor Santesso

Telephone No.: (41-22) 338.83.38

Facsimile No.: (41-22) 740.14.35



PCT

INTERNATIONAL SEARCH REPORT

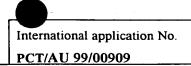
(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER ACTION	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.				
International application No.	International filing date (day/month/year) (Earliest) Priority Date (day/month/year)					
PCT/AU 99/00909	19 October 1999		19 October 1998			
Applicant MITSUBISHI AUSTRALIA						
This international search report has been pre- Article 18. A copy is being transmitted to the	pared by this Internations e International Bureau.	al Searching Authority a	nd is transmitted to the applicant according to			
This international search report consists of a						
It is also accompanied by a	copy of each prior art doc	cument cited in this repo	ort.			
1. Basis of the report						
a. With regard to the language, the which it was filed, unless otherw.	international search was ise indicated under this it	carried out on the basis tem.	of the international application in the language in			
Authority (Rule 23.1(b)).		,	international application furnished to this			
b. With regard to any nucleotide an carried out on the basis of the seq		ce disclosed in the inter	national application, the international search was			
contained in the internation	onal application in writte	n form.				
filed together with the int	ernational application in	computer readable form	ı.			
furnished subsequently to	this Authority in written	form.				
furnished subsequently to	this Authority in comput	ter readable form.				
application as filed has be	en furnished.		s not go beyond the disclosure in the international dentical to the written sequence listing has been			
E Certain claims were foun	d unsearchable (See Bo	x I).				
3. Unity of invention is lacki	ing (See Box II).					
4. With regard to the title,	the text is approved as	submitted by the applic	cant.			
	the text has been estab	lished by this Authority	to read as follows:			
5. With regard to the abstract,	the text is approved as s	submitted by the applica	nt			
X	the text has been establic. The applicant may, with submit comments to this	nin one month from the	38.2(b), by this Authority as it appears in Box III. date of mailing of this international search report,			
6. The figure of the drawings to be publ	6. The figure of the drawings to be published with the abstract is Figure No. 1					
X	as suggested by the app		None of the figures			
	because the applicant fa	niled to suggest a figure				
	because this figure bette	er characterizes the inve	ention			

ij

International application No.
PCT/AU 99/00909

Box 1	Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This inte	rnational search report has not been established in respect of certain claims under Article 17(2)(a) for the following
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2.	Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3.	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)
Box II	Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This Inte	ernational Searching Authority found multiple inventions in this international application, as follows:
See at	ttached sheet
1.	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims
ফ	As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.	As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4.	No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark	on Protest The additional search fees were accompanied by the applicant's protest.



Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The present invention provides apparatus and methods for adjusting the atmosphere within a substantially sealed chamber (11) containing respiring produce. The chamber of the present invention includes inlet means (100) to permit ambient atmosphere to enter the chamber, and outlet means (20) to permit chamber atmosphere to exit the chamber. Methods using apparatus of the present invention comprise:

- (a) monitoring the oxygen concentration within the chamber;
- (b) following detection that the oxygen concentration in the chamber has fallen below a predetermined amount, opening the inlet means so that the amount of oxygen in the chamber increases; and
- (c) removing carbon dioxide from the chamber atmosphere substantially at a predetermined rate, the predetermined rate having been selected such that the carbon dioxide concentration within the chamber atmosphere does not substantially exceed a predetermined amount.

The methods may also comprise opening the inlet means for a time that is approximately proportional to the difference between the detected oxygen concentration and an oxygen setpoint.

International application No. PCT/AU 99/00909

A. CLASSIFICATION OF SUBJECT MATTER

Int Cl⁶

B65D 81/24, 85/50, A23L 3/3409

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B65D 81/00, 81/18, 81/24, 85/50, A23L 3/34, 3/3409, 3/3418, 3/3427, 3/3436, 3/3445

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) WPAT (and keywords)

C.	DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
x	WO 92/15499 A (CSIRO) 17 September 1992 Whole document	35-37,39,69-72,75,81, 96-99,102,108-111,
x	WO 91/15719 A (TRANSFRESH CORPORATION) 17 October 1991 Whole document	35-37,39,69-72,81, 96-99,108-111,116,150
x	EP 0353021 A (TRANSFRESH CORPORATION) 31 January 1990 Whole document	35-37,39,69-72,81, 96-99,108-111,116, 132-144,150

	Y Further documents are listed in the continuation of Box C		X See patent family annex
•	Special categories of cited documents:	"T"	later document published after the international filing date or
"A" "E"	document defining the general state of the art which is not considered to be of particular relevance earlier application or patent but published on or after	"X"	priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an
"L"	the international filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	inventive step when the document is taken alone document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is
"O" "P"	document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed	"&"	combined with one or more other such documents, such combination being obvious to a person skilled in the art document member of the same patent family
1	the actual completion of the international search	I	Date of mailing of the international search report 3 1 JAN 2000
Name a	nd mailing address of the ISA/AU	1	Authorized officer

M.J. O'ROURKE

Telephone No.: (02) 6283 2017

AUSTRALIAN PATENT OFFICE

Facsimile No.: (02) 6285 3929

PO BOX 200

WODEN ACT 2606 AUSTRALIA



International application No. PCT/AU 99/00909

C (Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT	<u> </u>
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 95/05753 A (DOW CHEMICAL COMPANY) 2 March 1995 Whole document	143,144
X	Patent Abstracts of Japan, M-985, page 6 JP 2-82083 A (RYUHEI FUKUDA) 22 March 1990 Abstract	143,144
x	EP 0136042 A (SHIPPING CORPORATION OF NEW ZEALAND LIMITED) 3 April 1985 Whole document	35-37,39,40, 69-72,81,96- 99,108-111, 116,132-144, 150
x	US 5322701 A (CULLEN ET AL.) 21 June 1994 Whole document	147
x	EP 0142903 A (DOUWE EGBERTS KON) 29 May 1985 Whole document	147
x	US 4079152 A (BEDROSIAN ET AL.) 14 March 1978 Whole document	147

International application No.

PCT/AU 99/00909

Box

Continuation of Box II

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are different inventions as follows:

- 1. Claims 1 to 34, 41 to 68, 82 to 95, 117 to 131, 145, 146 and 149 relate to a method of adjusting atmosphere in a sealed chamber with inlet means and outlet means, including the steps of monitoring oxygen levels, admitting ambient air, and removing carbon dioxide substantially at a predetermined rate. It is considered that the carbon dioxide removal comprises a first "special technical feature".
- 2. Claims 38, 73, 100, and 112 relate to a method of adjusting atmosphere in a sealed chamber with inlet means and outlet means, including the steps of monitoring oxygen levels, and admitting ambient air. It is considered that the comparison with a number of pre-determined ranges comprises a second "special technical feature".
- 3. Claims 74, 76, 101, 103 and 113 relate to a method of adjusting atmosphere in a sealed chamber with inlet means and outlet means, including the steps of monitoring oxygen levels and admitting ambient air. It is considered that the leakage paths associated with the door comprise a third "special technical feature".
- 4. Claims 77 to 80 and 104 to 107 relate to a method of adjusting atmosphere in a sealed chamber with inlet means and outlet means, including the steps of monitoring oxygen levels, and admitting ambient air. It is considered that the receptacle having a fan comprises a fourth "special technical feature".
- 5. Claim 148 is directed to a method of adjusting the level of carbon dioxide in a container making use of a specific mathematical formula. It is considered that this feature comprises a fifth "special technical feature". This claim does not include any steps relating to monitoring oxygen levels.
- 6. Claims 151 and 152 relate to a method of adjusting atmosphere in a sealed chamber with inlet means and outlet means, including the steps of monitoring oxygen levels, and admitting ambient air. It is considered that the calculation of the oxygen setpoint derived from the described mathematical formula comprises a sixth "special technical feature".

The remaining claims were found to lack either novelty or an inventive step, and hence possess no "special technical features."

These groups of inventions are not so linked as to form a single general inventive concept, that is, they do not have any common inventive features, which define a contribution over the prior art. The common concept linking together these groups of claims is the adjustment of atmosphere in a chamber. However this concept is not novel in the light of either common general knowledge or the documents cited in this ISR. Therefore these claims lack unity a posteriori.

Information on patent family members

International application No. PCT/AU 99/00909

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Do	cument Cited in Search Report		÷	Patent	Family Member		
wo	92/15499	AU	13221/92	EP	573502	NZ	241766
		US	5443851	ZA	9201466		
wo	91/15719	AU	74301/91	EP	457431	NZ	237801
		ZA	9102658	US	5872721		
EP	353021	AU	38968/89	JP	2-167027	NZ	225620
		US	4987745	ZA	8905673		
EP	136042	AU	32431/84	JP	61-025443	NZ	205453
		US	4642996	US	4716739	ZA	8406661
wo	95/05753	AU	74645/94				
JP	2-082083	NIL					
US	5322701	NIL					
EP	142903	NL	8304015				
US	4079152	US	4423080				
:	·						END OF ANNEX

NT COOPERATION TREATY

From the:

INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

McMASTER OBERIN ARTHUR ROBINSON & **HEDDERWICKS GPO BOX 1776Q** MELBOURNE VIC 3001

NOTIFICATION OF TRANSMITTAL OF INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Rule 71.1)

IMPORTANT NOTIFICATION

Date of mailing day/month/year

D4 OCT 2000

Applicant's or agent's file reference

International application No. PCT/AU99/00909

110134

International filing date 19 October 1999

Priority date

19 October 1998

Applicant

MITSUBISHI AUSTRALIA LIMITED et al

- The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the 1. international preliminary examination report and its annexes, if any, established on the international application.
- A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all 2. the elected Offices.
- Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report 3. (but not of any annexes) and will transmit such translations to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide

Name and mailing address of the IPEA/AU

AUSTRALIAN PATENT OFFICE

PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au

Facsimile No. (02) 6285 3929

Authorized officer

M.J. O'ROURKE

Telephone No. (02) 6283 2017

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference	FOR FURTHER ACTION		ransmittal of International Preliminary (Form PCT/IPEA/416).		
International application No.	International filing dat	te (day/month/year)	Priority Date (day/month/year)		
PCT/AU99/00909	19 October 1999		19 October 1998		
International Patent Classification (IPC	or national classification	on and IPC			
Int. Cl. ⁷ B65D 81/24, 85/50, A231	L 3/3409				
Applicant MITSUBISHI AUSTRALI	A LIMITED et al				
This international preliminary Authority and is transmitted to			International Preliminary Examining		
2. This REPORT consists of a to	tal of 5 sheets, include	ding this cover sheet.			
been amended and are the	This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).				
These annexes consist of a tot	al of sheet(s).				
3. This report contains indications relat	ing to the following iter	ns:			
I X Basis of the repor	rt				
II Priority					
III Non-establishmer	nt of opinion with regard	d to novelty, inventive	step and industrial applicability		
IV X Lack of unity of i	nvention		,		
VI Certain documen	ts cited .				
VII Certain defects in	Fects in the international application				
VIII Certain observati	VIII Certain observations on the international application				
		National Community of All			
Date of submission of the demand 18 May 2000		Date of completion of the September 2000	e report		
Name and mailing address of the IPEA/AU		authorized Officer			
AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUST E-mail address: pct@ipausralia.gov.au	RALIA N	A.J. O'ROURKE	·		
Facsimile No. (02) 6285 3929 Telephone No. (02) 6283 2017					

I.	Basis of the report
1.	With regard to the elements of the international application:*
	X the international application as originally filed.
	the description, pages, as originally filed,
	pages, filed with the demand,
	pages, received on with the letter of
	the claims, pages, as originally filed,
	pages, as amended (together with any statement) under Article 19,
	pages, filed with the demand,
	pages, received on with the letter of
	the drawings, pages, as originally filed,
	pages, filed with the demand,
	pages, received on with the letter of
!	the sequence listing part of the description:
	pages , as originally filed
	pages , filed with the demand
	pages, received on with the letter of
2.	With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language which is:
	the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
	the language of publication of the international application (under Rule 48.3(b)).
	the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).
3.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application, was on the basis of the sequence listing:
	contained in the international application in written form.
	filed together with the international application in computer readable form.
	furnished subsequently to this Authority in written form.
	furnished subsequently to this Authority in computer readable form.
	The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
	The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished
4.	The amendments have resulted in the cancellation of:
	the description, pages
	the claims, Nos.
	the drawings, sheets/fig.
5.	This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**
*	Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this
**	report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17). Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report

IV.	Lack of unity of invention
1.	In response to the invitation to restrict or pay additional fees the applicant has:
	restricted the claims.
	paid additional fees.
	paid additional fees under protest.
	neither restricted nor paid additional fees.
2.	This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3.	This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
	complied with.
	X not complied with for the following reasons:
(see e	extra sheet)
4.	Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:
	X all parts.
	the parts relating to claims Nos.

V.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
1.	Statement					
	Novelty (N)	Claims 1-34,38,41-68,73,74,76-80,82-95,100,101,103- 107,112,113,117-131,145,146,148,149,151,152	YES			
		Claims 35-37,39,40,69-72,75,81,96-99,102,108- 111,114-116,132-144,147,150	NO			
	Inventive step (IS)	Claims 1-34,38,41-68,73,74,76-80,82-95,100,101,103- 107,112,113,117-131,145,146,148,149,151,152	YES			
	•	Claims 35-37,39,40,69-72,75,81,96-99,102,108- 111,114-116,132-144,147,150	NO			
	Industrial applicability (IA)	Claims 1 to 152	YES			
		Claims	NO			

- 2. Citations and explanations (Rule 70.7)
 - 1. WO 92/15499 discloses the features of claims 35-37,39,69-72,75,81,96-99,102,108-111,114-116,150
 - 2. WO 91/15719 discloses the features of claims 35-37,39,69-72,81,96-99,108-111,116,150
 - 3. EP 353021 discloses the features of claims 35-37,39,69-72,81,96-99,108-111,116,132-144,150
 - 4. WO 95/05753 discloses the features of claims 143,144
 - 5. JP 2-82083 (abstract) discloses the features of claims 143,144
 - 6. EP 136042 discloses the features of claims 35-37,39,40,69-72,81,96-99,108-111,116,132-144,150
 - 7. US 5322701 discloses the features of claim 147
 - 8. EP 142903 discloses the features of claim 147
 - 9. US 4079152 discloses the features of claim 147

The remaining claims are novel and inventive. (The novelty-conferring special technical features of these claims are listed in Box IV in the discussion of lack of unity of invention.)

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of IV

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Examining Authority has found that there are different inventions as follows:

- 1. Claims 1 to 34, 41 to 68, 82 to 95, 117 to 131, 145, 146 and 149 relate to a method of adjusting atmosphere in a sealed chamber with inlet means and outlet means, including the steps of monitoring oxygen levels, admitting ambient air, and removing carbon dioxide substantially at a predetermined rate. It is considered that the carbon dioxide removal comprises a first "special technical feature".
- 2. Claims 38, 73, 100, and 112 relate to a method of adjusting atmosphere in a sealed chamber with inlet means and outlet means, including the steps of monitoring oxygen levels, and admitting ambient air. It is considered that the comparison with a number of pre-determined ranges comprises a second "special technical feature"
- Claims 74, 76, 101, 103 and 113 relate to a method of adjusting atmosphere in a sealed chamber with inlet means and outlet means, including the steps of monitoring oxygen levels and admitting ambient air. It is considered that the leakage paths associated with the door comprise a third "special technical feature".
- 4. Claims 77 to 80 and 104 to 107 relate to a method of adjusting atmosphere in a sealed chamber with inlet means and outlet means, including the steps of monitoring oxygen levels, and admitting ambient air. It is considered that the receptacle having a fan comprises a fourth "special technical feature".
- 5. Claim 148 is directed to a method of adjusting the level of carbon dioxide in a container making use of a specific mathematical formula. It is considered that this feature comprises a fifth "special technical feature". This claim does not include any steps relating to monitoring oxygen levels.
- 6. Claims 151 and 152 relate to a method of adjusting atmosphere in a sealed chamber with inlet means and outlet means, including the steps of monitoring oxygen levels, and admitting ambient air. It is considered that the calculation of the oxygen setpoint derived from the described mathematical formula comprises a sixth "special technical feature".

The remaining claims were found to lack either novelty or an inventive step, and hence possess no "special technical features."

These groups of inventions are not so linked as to form a single general inventive concept, that is, they do not have any common inventive features, which define a contribution over the prior art. The common concept linking together these groups of claims is the adjustment of atmosphere in a chamber. However this concept is not novel in the light of either common general knowledge or the documents cited in this ISR. Therefore these claims lack unity a posteriori.

The International Search Report covered all of the claims.